In The Specification:

Please amend the paragraph beginning on page 5, line 29 and ending one page 6, line 4 of the originally filed application as indicated below. This paragraph is presented as paragraph [0025] on page 2 of the corresponding U.S. patent publication (i.e., 2006/0225773).

Part of the role of the heat sink/gate 28 is to dissipate from the trans-thermoelectric device 20 a fraction of the waste-heat from heat source side. Thereby, one leg of the trans-thermoelectric device 20 on the heat drain side does not have to pump this fraction of waste-heat to the heat drain 30. The heat sink/gate 28 provides a thermal path, but does not provide an electrical path for current flow. Rather, current flows from the heat source side p-leg to the heat drain side p-leg. As such, the trans-thermoelectric device 20 uses both active cooling and heating within the two legs 22a of the unipolar couple element 22, simultaneously, to achieve a large ΔT_{max} in a single-stage couple, thus expanding the use of thermoelectric device technology and improving performance. Controller 82 may be configured to control a temperature of heat sink/gate 28 (e.g., a second-temperature stage) to produce desired source and drain temperatures on heat source 24 (e.g., a first-temperature stage) and heat drain 30 (e.g., a third-temperature stage), respectively. Controller 82 may be configured to control current flow through unipolar couple element 22 to produce desired source and drain temperatures.